

CLAIMS

1. A dose indicator (A) for a fluid dispenser device (B), said indicator being characterized in that it comprises a rotary counting wheel (10) that is displaceable in rotation, and a slide member (20) that is displaceable in translation, said counting wheel including indicator means (15), indicating the number of doses dispensed or the number of doses still to be dispensed, and co-operating with a display opening (25) provided in said slide member (20), said rotary counting wheel (10) including a hollow profile (18) co-operating with a projection (28) of said slide member (20), the shape of said hollow profile (18) being such that at least some rotations of said rotary counting wheel (10) cause said slide member (20) to be displaced in translation, thereby modifying the position of said slide member (20) relative to said counting wheel (10).
2. An indicator according to claim 1, in which said indicator means (15) follow said hollow profile (18) at least in part.
3. An indicator according to claim 1 or claim 2, in which the shape of said hollow profile (18) is irregular so that dose indication is progressive.
4. An indicator according to any preceding claim, in which said hollow profile (18) is spiral-shaped at least in part.
5. An indicator according to any preceding claim, in which said rotary counting wheel (10) and said slide member (20) are disposed in a cover (40) including a display window (45) co-operating with the display opening (25) of the slide member (20).

6. An indicator according to any preceding claim, in which said rotary counting wheel (10) is a thin disk including a set of teeth (19), said set of teeth (19) co-operating with actuator means (31, 34, 35) which are
5 designed to cause said rotary disk (10) to turn.

7. An indicator according to claim 6, in which said actuator means include a drive element (31) secured to a ring (30) surrounding said set of teeth (19), said drive
10 element (31) coming to co-operate with said set of teeth (19) each time a dose is dispensed.

8. An indicator according to claim 7, in which said ring (30) includes anti-return means (36, 37) preventing said
15 rotary disk (10) from turning in the direction opposite to the direction in which it is turned by said drive element (31).

9. An indicator according to claim 7 or claim 8, in which
20 said actuator means include at least one flexible tab (31).

10. An indicator according to any one of claims 7 to 9, in which said actuator means include a transmission
25 element (34) which is designed to co-operate with said fluid dispenser device (B) each time said device is actuated, said transmission element (34) also co-operating with said drive element (31) so as to cause said rotary disk (10) to turn.

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11. An indicator according to claim 10, in which said transmission element (34) is a shoulder secured to said drive element (31), and co-operating with a portion (54) of the fluid dispenser device (B) which moves during
35 actuation.

12. An indicator according to any one of claims 5 to 11,
in which the rotary counting wheel (10), the slide member
(20), the actuator means (31, 34, 35), and the cover (40)
form a unit which can be assembled in a fluid dispenser
5 device (B).

13. An indicator according to any one of claims 6 to 12,
in which the actuator means include a flexible tab (31)
comprising a first flexible-tab portion (32) and a second
10 flexible-tab portion (33) that is more rigid than the
first tab portion (32), the first tab portion (32)
supporting an actuator pin (35) which is designed to co-
operate with the set of teeth (19) of said rotary
counting wheel (10) each time the device is actuated.

14. An indicator according to claim 13, in which said
ring (30) includes an abutment (39) which is designed to
co-operate with a blocking element (38) secured to said
flexible tab (31) so as to limit the rotation of said
20 rotary counting wheel (10).

15. An indicator according to claim 14, in which the more
rigid, second tab portion (33) is designed to flex as
soon as the blocking element (38) is blocked by the
25 ~~abutment means (39) of the ring (30):~~

16. An indicator according to any one of claims 13 to 15,
in which the rotary counting wheel (10) is rotated by the
first part of the actuation stroke of the fluid dispenser
30 device (B), the flexion of the more rigid, second tab
portion enabling said actuation stroke of the fluid
dispenser device (B) to be continued, despite the
blocking element (38) being blocked by the abutment means
(39).

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17. An indicator according to any preceding claim, in which said indicator means (15) are numbers and/or symbols and/or colors.

5 18. A fluid dispenser device (B), comprising a fluid reservoir (51) and a dispenser member (52), such as a pump or a valve, mounted on said reservoir (51), said device being characterized in that it further comprises a dose indicator (A) according to any preceding claim.

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19. A device according to claim 18, in which the dose indicator (A) is actuated by a portion (54) of the reservoir (51) which is displaced while the device (B) is being actuated, and which co-operates with a transmission
15 element (34) of said indicator (A).